

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|-------|-------|--|---|------------------|---------|------------------|
| S4 | 6 | (McColloch near2 Ray).in. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 06:53 |
| S2 | 6 | (McColloch near3 Laurence near2 Ray).in. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 06:53 |
| S1 | 2 | ("20050129074").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/01/12 06:53 |
| S3 | 12 | (McColloch near3 Laurence).in. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 07:11 |
| S5 | 6083 | laser and (submount or mount or substrate or wafer) and lid and ((metal or layer or surface or region or film) with (In or Ga or Hg or Sn or Pb or indium or gallium or mercury or tin or lead)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 07:21 |
| S6 | 8257 | laser and (submount or mount or substrate or wafer or base) and lid and ((metal or layer or surface or region or film) with (In or Ga or Hg or Sn or Pb or indium or gallium or mercury or tin or lead)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 07:22 |
| S7 | 56339 | laser and (submount or mount or substrate or wafer or base) and (lid or cover) and ((metal or layer or surface or region or film) near3 (In or Ga or Hg or Sn or Pb or indium or gallium or mercury or tin or lead)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 07:23 |
| S10 | 16 | (laser near3 die) and (submount or mount or substrate or wafer or base) and (lid or cover) and ((metal or layer or surface or region or film) near3 (In or Ga or Hg or Sn or Pb or indium or gallium or mercury or tin or lead)) and (photodetector or (photo near3 detector)) and "372"/\$.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 07:24 |
| S8 | 4685 | laser and (submount or mount or substrate or wafer or base) and (lid or cover) and ((metal or layer or surface or region or film) near3 (In or Ga or Hg or Sn or Pb or indium or gallium or mercury or tin or lead)) and (photodetector or (photo near3 detector)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 07:24 |
| S11 | 57 | (laser near3 die) and (submount or mount or substrate or wafer or base) and (lid or cover) and ((metal or layer or surface or region or film) near3 (In or Ga or Hg or Sn or Pb or indium or gallium or mercury or tin or lead)) and (photodetector or (photo near3 detector)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 07:37 |
| S12 | 90 | (laser near3 die) and (submount or mount or substrate or wafer or base) and (lid or cover or housing or packag\$3) and ((metal or layer or surface or region or film) near3 (In or Ga or Hg or Sn or Pb or indium or gallium or mercury or tin or lead)) and (photodetector or (photo near3 detector)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 07:38 |

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|-----|-----|--|---|-----|----|------------------|
| S13 | 19 | (laser near3 die) and (submount or mount or substrate or wafer or base) and (lid or cover or housing or packag\$3) and ((metal or layer or surface or region or film) near3 (In or Ga or Hg or Sn or Pb or indium or gallium or mercury or tin or lead)) and ((photodetector near3 die) or (photo near3 detector near3 die)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 07:46 |
| S16 | 1 | S15 AND S14 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 08:11 |
| S19 | 1 | S15 and S17 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 08:12 |
| S18 | 31 | (laser NEAR3 die) and ((metal or layer or surface or region or film) near3 (In or Ga or Hg or Sn or Pb or indium or gallium or mercury or tin or lead)) and ((photodetector) or (photo near3 detector)) and (laser near3 driv\$3) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 08:12 |
| S17 | 126 | (laser NEAR3 die) and ((metal or layer or surface or region or film) near3 (In or Ga or Hg or Sn or Pb or indium or gallium or mercury or tin or lead)) and ((photodetector) or (photo near3 detector)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 08:12 |
| S21 | 11 | (laser near3 die) and (submount\$3 or mount\$3 or substrate or wafer or base) and (lid or cover or housing or packag\$3) and ((metal or layer or surface or region or film) near3 (In or Ga or Hg or Sn or Pb or indium or gallium or mercury or tin or lead)) and ((photodetector near3 die) or (photo near3 detector near3 die)) and (laser near3 driv\$3) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 08:13 |
| S20 | 1 | S15 and S18 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 08:13 |
| S14 | 19 | (laser near3 die) and (submount\$3 or mount\$3 or substrate or wafer or base) and (lid or cover or housing or packag\$3) and ((metal or layer or surface or region or film) near3 (In or Ga or Hg or Sn or Pb or indium or gallium or mercury or tin or lead)) and ((photodetector near3 die) or (photo near3 detector near3 die)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 08:13 |
| S22 | 5 | (laser near3 die) and (submount\$3 or mount\$3 or substrate or wafer or base) and (lid or cover or housing or packag\$3) and ((metal or layer or surface or region or film) near3 (In or Ga or Hg or Sn or Pb or indium or gallium or mercury or tin or lead)) and ((photodetector near3 die) or (photo near3 detector near3 die)) and (laser near3 driv\$3 near3 die) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 08:14 |
| S25 | 2 | (laser near3 die) and (submount\$3 or mount\$3 or substrate or wafer or base) and (lid or cover or housing or packag\$3) and ((metal or layer or surface or region or film) near3 ((cold near3 flow\$3) or creep\$4)) and ((photodetector) or (photo near3 detector)) and (laser near3 driv\$3) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 08:17 |
| S24 | 2 | (laser near3 die) and (submount\$3 or mount\$3 or substrate or wafer or base) and (lid or cover or housing or packag\$3) and ((metal or layer or surface or region or film) near3 ((cold near3 flow\$3) or creep\$4)) and ((photodetector near3 die) or (photo near3 detector near3 die)) and (laser near3 driv\$3 near3 die) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 08:17 |

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|-----|-----|--|---|-----|----|------------------|
| S26 | 2 | (laser) and (submount\$3 or mount\$3 or substrate or wafer or base) and (lid or cover or housing or packag\$3) and ((metal or layer or surface or region or film) near3 ((cold near3 flow\$3) or creep\$4)) and ((photodetector) or (photo near3 detector)) and (laser near3 driv\$3) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 08:23 |
| S27 | 808 | (laser) and (submount\$3 or mount\$3 or substrate or wafer or base) and (lid or cover or housing or packag\$3) and ((metal or layer or surface or region or film) near3 ((cold near3 flow\$3) or creep\$4) or cool\$4) and ((photodetector) or (photo near3 detector)) and (laser near3 driv\$3) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 08:24 |
| S29 | 5 | (laser) and (submount\$3 or mount\$3 or substrate or wafer or base) and (lid or cover or housing or packag\$3) and ((metal or layer or surface or region or film) WITH ((cold near3 flow\$3) or creep\$4)) and (thermal\$4 or cool\$4) and ((photodetector) or (photo near3 detector)) and (laser near3 driv\$3) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 08:26 |
| S30 | 5 | (laser) and (submount\$3 or mount\$3 or substrate or wafer or base) and (lid or cover or housing or packag\$3) and ((metal or layer or surface or region or film or medium) WITH ((cold near3 flow\$3) or creep\$4)) and (thermal\$4 or cool\$4) and ((photodetector) or (photo near3 detector)) and (laser near3 driv\$3) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 08:28 |
| S32 | 626 | (laser) and (submount\$3 or mount\$3 or substrate or wafer or base) and (lid or cover or housing or packag\$3) and ((metal or layer or surface or region or film or medium) near4 ((cold near3 flow\$3) or creep\$4)) and (thermal\$4 or cool\$4) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 08:34 |
| S31 | 931 | (laser) and (submount\$3 or mount\$3 or substrate or wafer or base) and (lid or cover or housing or packag\$3) and ((metal or layer or surface or region or film or medium) WITH ((cold near3 flow\$3) or creep\$4)) and (thermal\$4 or cool\$4) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 08:34 |
| S34 | 5 | (laser) and (submount\$3 or mount\$3 or substrate or wafer or base) and (lid or cover or housing or packag\$3) and ((metal or layer or surface or region or film or medium) near4 ((cold near3 flow\$3) or creep\$4)) and (thermal\$4 or cool\$4) and ((photodetector) or (photo near3 detector) or detector or photodiode or (photo near3 diode)) and (laser near3 driv\$3) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 08:36 |
| S35 | 11 | ("4661959" "4998256" "5436920").PN. OR ("6219364").URPN. | US-PGPUB; USPAT; USOCR | AND | ON | 2006/01/12 08:37 |
| S33 | 317 | (laser) and (submount\$3 or mount\$3 or substrate or wafer or base) and (lid or cover or housing or packag\$3) and ((metal or layer or surface or region or film or medium) near4 ((cold near3 flow\$3) or creep\$4)) and (thermal\$4 or cool\$4) and ((photodetector) or (photo near3 detector) or detector or photodiode or (photo near3 diode)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 08:39 |
| S36 | 2 | (laser) and (submount\$3 or mount\$3 or substrate or wafer or base) and (lid or cover or housing or packag\$3) and ((metal or layer or surface or region or film or medium) near4 ((cold near3 flow\$3) or creep\$4)) and (thermal\$4 or cool\$4) and ((photodetector) or (photo near3 detector) or detector or photodiode or (photo near3 diode)) and "372"/\$.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 09:44 |
| S37 | 5 | (laser) and (submount\$3 or mount\$3 or substrate or wafer or base) and (lid or cover or housing or packag\$3) and ((metal or layer or surface or region or film or medium) near4 ((cold near3 flow\$3) or creep\$4)) and (thermal\$4 or cool\$4) and ((photodetector) or (photo near3 detector) or detector or photodiode or (photo near3 diode)) and (laser near3 driv\$3) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 09:45 |
| S38 | 5 | (laser) and (lid or cover or housing or packag\$3) and ((metal or layer or surface or region or film or medium) near4 ((cold near3 flow\$3) or creep\$4)) and (thermal\$4 or cool\$4) and ((photodetector) or (photo near3 detector) or detector or photodiode or (photo near3 diode)) and (laser near3 driv\$3) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 09:46 |

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| S39 | 35 | 372/34.ccls. and 372/38.02.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 10:03 |
| S40 | 628 | (laser near3 packag\$3) and "257"/\$.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 10:09 |
| S41 | 97 | (laser near3 packag\$3) and "257"/\$.ccls. and "372"/\$.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 10:13 |
| S42 | 27 | (laser near3 packag\$3) and "257"/\$.ccls. and "372"/\$.ccls. and (laser near3 driv\$4) and ((photodetector) or (photo near3 detector) or detector or photodiode or (photo near3 diode)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 10:23 |
| S45 | 18 | (laser near3 packag\$3) and "257"/\$.ccls. and "372"/\$.ccls. and (laser near3 driv\$4) and ((photodetector) or (photo near3 detector) or detector or photodiode or (photo near3 diode)) and (thermal\$4 or cool\$4) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 10:26 |
| S44 | 0 | (laser near3 packag\$3) and "257"/\$.ccls. and "372"/\$.ccls. and (laser near3 driv\$4) and ((photodetector) or (photo near3 detector) or detector or photodiode or (photo near3 diode)) and ((metal or layer or surface or region or film or medium) near4 ((cold near3 flow\$3) or creep\$4)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 10:26 |
| S46 | 14 | (laser near3 packag\$3) and "257"/\$.ccls. and "372"/\$.ccls. and (laser near3 driv\$4) and ((photodetector) or (photo near3 detector) or detector or photodiode or (photo near3 diode)) and ((metal or layer or surface or region or film or medium) near4 ((cold near3 flow\$3) or creep\$4) or Ga or Hg or Sn or Pb or indium or gallium or mercury or tin or lead) and (thermal\$4 or cool\$4) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 10:27 |
| S43 | 0 | (laser near3 packag\$3) and "257"/\$.ccls. and "372"/\$.ccls. and (laser near3 driv\$4) and ((photodetector) or (photo near3 detector) or detector or photodiode or (photo near3 diode)) and ((metal or layer or surface or region or film or medium) near4 ((cold near3 flow\$3) or creep\$4)) and (thermal\$4 or cool\$4) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 10:27 |
| S47 | 21 | (laser near3 packag\$3) and "257"/\$.ccls. and "372"/\$.ccls. and (laser near3 driv\$4) and ((photodetector) or (photo near3 detector) or detector or photodiode or (photo near3 diode)) and ((metal or layer or surface or region or film or medium) near4 ((cold near3 flow\$3) or creep\$4) or Ga or Hg or Sn or Pb or indium or gallium or mercury or tin or lead) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 10:28 |
| S49 | 1 | (laser near3 die) and (submount\$3 or mount\$3 or substrate or wafer or base) and (lid or cover or housing or packag\$3) and ((metal or layer or surface or region or film or conduct\$3) near3 (Ga or Hg or Sn or Pb or indium or gallium or mercury or tin or lead)) and ((photodetector near3 die) or (photo near3 detector near3 die)) and (laser near3 driv\$3 near3 die) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 10:33 |
| S51 | 2 | (laser near3 packag\$3) and (laser near3 driv\$4) and ((photodetector) or (photo near3 detector) or detector or photodiode or (photo near3 diode)) and ((metal or layer or surface or region or film or medium) near4 ((cold near3 flow\$3) or creep\$4)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 10:39 |

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| S48 | 686 | ((laser near3 packag\$3) and (laser near3 driv\$4) and ((photodetector) or (photo near3 detector) or detector or photodiode or (photo near3 diode)) and ((metal or layer or surface or region or film or medium) near4 ((cold near3 flow\$3) or creep\$4) or Ga or Hg or Sn or Pb or indium or gallium or mercury or tin or lead)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 10:39 |
| S52 | 248 | ((laser near3 packag\$3) and (laser near3 driv\$4) and ((photodetector) or (photo near3 detector) or detector or photodiode or (photo near3 diode)) and ((metal or layer or surface or region or film or medium or conduct\$3) near4 (Ga or Hg or Sn or Pb or indium or gallium or mercury or tin or lead)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 10:40 |
| S50 | 1 | ((laser near3 packag\$3) and (laser near3 driv\$4) and ((photodetector) or (photo near3 detector) or detector or photodiode or (photo near3 diode)) and ((metal or layer or surface or region or film or medium or conduct\$3) near4 ((cold near3 flow\$3) or creep\$4)) and ((metal or layer or surface or region or film or medium or conduct\$3) near4 (Ga or Hg or Sn or Pb or indium or gallium or mercury or tin or lead)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 10:40 |
| S54 | 97 | S53 and thermal\$2 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 10:52 |
| S55 | 65 | S53 and (thermal\$2 near3 cool\$3) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 10:53 |
| S57 | 46 | ((laser near3 packag\$3) and (laser near3 driv\$4) and ((photodetector) or (photo near3 detector) or detector or photodiode or (photo near3 diode)) and (heat near2 sink) and pad\$4 and (thermal\$2 near3 cool\$3) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 11:25 |
| S58 | 128 | ((laser near3 packag\$3) and (laser near3 driv\$4) and ((photodetector) or (photo near3 detector) or detector or photodiode or (photo near3 diode)) and ((metal or layer or surface or (heat near2 sink) or region or film or medium or conduct\$3) near4 (Ga or Hg or Sn or Pb or indium or gallium or mercury or tin or lead)) and pad\$4 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 11:26 |
| S53 | 127 | ((laser near3 packag\$3) and (laser near3 driv\$4) and ((photodetector) or (photo near3 detector) or detector or photodiode or (photo near3 diode)) and ((metal or layer or surface or region or film or medium or conduct\$3) near4 (Ga or Hg or Sn or Pb or indium or gallium or mercury or tin or lead)) and pad\$4 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 11:26 |
| S60 | 1 | ((laser near3 die) (((metal or layer or surface or region or film or conduct\$4) near3 (Ga or Hg or Sn or Pb or indium or gallium or mercury or tin or lead))) and ((photodetector near3 die) or (photo near3 detector near3 die)) and (laser near3 driv\$3 near3 die) and (heat near3 sink) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 11:36 |
| S59 | 1 | ((laser near3 die) and (submount\$3 or mount\$3 or substrate or wafer or base) and (lid or cover or housing or packag\$3) and (((metal or layer or surface or region or film or conduct\$4) near3 (Ga or Hg or Sn or Pb or indium or gallium or mercury or tin or lead))) and ((photodetector near3 die) or (photo near3 detector near3 die)) and (laser near3 driv\$3 near3 die) and (heat near3 sink) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 11:38 |
| S62 | 8 | ((laser near3 die) and (((metal or layer or surface or region or film or conduct\$4) near3 (Ga or Hg or Sn or Pb or indium or gallium or mercury or tin or lead)) or (heat near2 sink)) and ((photodetector near3 die) or (photo near3 detector near3 die)) and (laser near3 driv\$3 near3 die) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 11:47 |

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|-----|--------|---|---|-----|----|------------------|
| S56 | 8 | (laser near3 die) and (submount\$3 or mount\$3 or substrate or wafer or base) and (lid or cover or housing or packag\$3) and (((metal or layer or surface or region or film or conduct\$4) near3 (Ga or Hg or Sn or Pb or indium or gallium or mercury or tin or lead)) or (heat near2 sink)) and ((photodetector near3 die) or (photo near3 detector near3 die)) and (laser near3 driv\$3 near3 die) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 11:47 |
| S63 | 29 | (laser) and (submount\$3 or mount\$3 or substrate or wafer or base) and (lid or cover or housing or packag\$3) and (((metal or layer or surface or region or film or conduct\$4) near3 (Ga or Hg or Sn or Pb or indium or gallium or mercury or tin or lead))) and ((photodetector) or (photo near3 detector)) and (laser near3 driv\$3) and (heat near3 sink) and (thermal\$2 near3 cool\$3) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 11:52 |
| S61 | 87 | (laser) and (submount\$3 or mount\$3 or substrate or wafer or base) and (lid or cover or housing or packag\$3) and (((metal or layer or surface or region or film or conduct\$4) near3 (Ga or Hg or Sn or Pb or indium or gallium or mercury or tin or lead))) and ((photodetector) or (photo near3 detector)) and (laser near3 driv\$3) and (heat near3 sink) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 12:01 |
| S65 | 159148 | (laser) and (submount\$3 or mount\$3 or substrate or wafer or base) and (lid or cover or housing or packag\$3) and (((metal or layer or surface or region or film or conduct\$4) near3 (Ga or Hg or Sn or Pb or indium or gallium or mercury or tin or lead))) and ((photodetector) or (photo near3 detector)) and (laser near3 driv\$3) and (heat near3 sink) or (cool\$4 near3 (element or device)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 12:03 |
| S67 | 57 | (laser) and (((metal or layer or surface or region or film or conduct\$4) near3 (Ga or Hg or Sn or Pb or indium or gallium or mercury or tin or lead))) and ((photodetector) or (photo near3 detector)) and (laser near3 driv\$3) and (heat near3 sink) and pad\$3 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 12:04 |
| S68 | 14 | (laser) and (submount\$3 or mount\$3 or substrate or wafer or base) and (lid or cover or housing or packag\$3 or cap) and (((metal or layer or surface or region or film or conduct\$4) near3 (Ga or Hg or Sn or Pb or indium or gallium or mercury or tin))) and ((photodetector) or (photo near3 detector)) and (laser near3 driv\$3) and (heat near3 sink) and (thermal\$2 near3 cool\$3) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 12:06 |
| S66 | 7157 | (laser) and (((metal or layer or surface or region or film or conduct\$4) near3 (Ga or Hg or Sn or Pb or indium or gallium or mercury or tin or lead))) and ((photodetector) or (photo near3 detector)) and (laser near3 driv\$3) and (heat near3 sink) or (cool\$4 near2 (element or device)) and pad\$3 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 12:06 |
| S64 | 29 | (laser) and (submount\$3 or mount\$3 or substrate or wafer or base) and (lid or cover or housing or packag\$3 or cap) and (((metal or layer or surface or region or film or conduct\$4) near3 (Ga or Hg or Sn or Pb or indium or gallium or mercury or tin or lead))) and ((photodetector) or (photo near3 detector)) and (laser near3 driv\$3) and (heat near3 sink) and (thermal\$2 near3 cool\$3) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 12:06 |
| S71 | 14 | (laser) and (((metal or layer or surface or region or film or conduct\$4) near3 (Ga or Hg or Sn or Pb or indium or gallium or mercury or tin))) and ((photodetector) or (photo near3 detector)) and (laser near3 driv\$3) and (heat near3 sink) and (thermal\$3 near3 cool\$4) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 12:07 |
| S69 | 7125 | (laser) and (((metal or layer or surface or region or film or conduct\$4) near3 (Ga or Hg or Sn or Pb or indium or gallium or mercury or tin))) and ((photodetector) or (photo near3 detector)) and (laser near3 driv\$3) and (heat near3 sink) or (cool\$4 near2 (element or device)) and pad\$3 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 12:07 |
| S70 | 12 | (laser) and (((metal or layer or surface or region or film or conduct\$4) near3 (Ga or Hg or Sn or Pb or indium or gallium or mercury or tin))) and ((photodetector) or (photo near3 detector)) and (laser near3 driv\$3) and (heat near3 sink) and (thermal\$3 near3 cool\$4) and pad\$3 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 12:08 |

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|-----|------|--|---|-----|----|------------------|
| S28 | 2 | (laser) and (submount\$3 or mount\$3 or substrate or wafer or base) and (lid or cover or housing or packag\$3) and ((metal or layer or surface or region or film) near3 ((cold near3 flow\$3) or creep\$4)) and (thermal\$4 or cool\$4) and ((photodetector) or (photo near3 detector)) and (laser near3 driv\$3) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 13:16 |
| S23 | 1 | (laser near3 die) and (submount\$3 or mount\$3 or substrate or wafer or base) and (lid or cover or housing or packag\$3) and ((metal or layer or surface or region or film) near3 (Ga or Hg or Sn or Pb or indium or gallium or mercury or tin or lead)) and ((photodetector near3 die) or (photo near3 detector near3 die)) and (laser near3 driv\$3 near3 die) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 13:18 |
| S72 | 1 | (laser near3 die) and (lid or cover or housing or packag\$3) and ((metal or layer or surface or region or film) near3 (Ga or Hg or Sn or Pb or indium or gallium or mercury or tin)) and ((photodetector or (photo near3 detector) or diode or photodiode or (photo near2 diode)) near3 die) and (laser near3 driv\$3 near3 die) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 13:19 |
| S74 | 8 | (laser near3 die) and ((photodetector or (photo near3 detector) or diode or photodiode or (photo near2 diode)) near3 die) and (laser near3 driv\$3 near3 die) and (heat near2 sink) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 13:21 |
| S75 | 42 | (laser near3 die) and (photodetector or (photo near3 detector) or diode or photodiode or (photo near2 diode)) and (laser near3 driv\$3) and (heat near2 sink) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 13:34 |
| S73 | 1 | (laser near3 die) and ((metal or layer or surface or region or film) near3 (Ga or Hg or Sn or Pb or indium or gallium or mercury or tin)) and ((photodetector or (photo near3 detector) or diode or photodiode or (photo near2 diode)) near3 die) and (laser near3 driv\$3 near3 die) and (heat near2 sink) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 13:34 |
| S77 | 1519 | (laser) and ((metal or layer or surface or region or film) near3 (Ga or Hg or Sn or Pb or indium or gallium or mercury or tin)) and (cover or housing or lid) and (heat near2 sink) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 13:35 |
| S76 | 35 | (laser near3 die) and (photodetector or (photo near3 detector) or photodiode or (photo near2 diode)) and (laser near3 driv\$3) and (heat near2 sink) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 13:35 |
| S78 | 27 | (laser near2 die) and ((metal or layer or surface or region or film) near3 (Ga or Hg or Sn or Pb or indium or gallium or mercury or tin)) and (cover or housing or lid) and (heat near2 sink) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 13:48 |
| S80 | 205 | 372/34.ccls. and 372/36.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 13:56 |
| S15 | 1512 | 372/34.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 13:56 |

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|-----|-----|---|---|-----|----|------------------|
| S79 | 28 | (laser near2 die) and ((metal or layer or region or film or conduct\$3) near5 (Ga or Hg or Sn or Pb or indium or gallium or mercury or tin)) and (cover or housing or lid) and (heat near2 sink) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 14:00 |
| S81 | 73 | (laser near2 die) and ((metal or layer or region or film or conduct\$3) near5 ((cold near3 flow\$3) or yield\$1 or thermal\$2)) and (cover or housing or lid) and (heat near2 sink) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 14:03 |
| S82 | 75 | (laser near2 die) and ((metal or layer or region or film or conduct\$3) near5 ((cool\$4 near2 flow\$3) or (cool\$4 near2 yield\$1) or (cool\$4 near2 down) or (cool\$4 near2 off) or cold or chill or thermal\$2)) and (cover or housing or lid) and (heat near2 sink) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 14:09 |
| S84 | 61 | (laser near2 die) and ((metal or layer or region or film or conduct\$3) near5 ((cool\$4 near2 flow\$3) or (cool\$4 near2 yield\$1) or (cool\$4 near2 down) or (cool\$4 near2 off) or cold or chill\$3)) and (cover or housing or lid) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 14:10 |
| S85 | 315 | (laser) and ((metal or layer or region or film or conduct\$3) near5 ((cold near2 flow\$3) or ((cold or cool\$4) near2 yield\$1) or (cool\$4 near2 down) or (cool\$4 near2 off) or cold or chill\$3)) and (cover or housing or lid) and (heat near2 sink) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 14:12 |
| S83 | 5 | (laser near2 die) and ((metal or layer or region or film or conduct\$3) near5 ((cool\$4 near2 flow\$3) or (cool\$4 near2 yield\$1) or (cool\$4 near2 down) or (cool\$4 near2 off) or cold or chill\$3)) and (cover or housing or lid) and (heat near2 sink) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 14:14 |
| S86 | 5 | (laser near2 die) and ((metal or layer or region or film or conduct\$3) near5 (((cool\$4 or cold) near2 flow\$3) or ((cool\$4 or cold) near2 yield\$1) or ((cool\$4 or cold) near2 down) or ((cool\$4 or cold) near2 off) or cold or chill\$3)) and (cover or housing or lid) and (heat near2 sink) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 14:17 |
| S9 | 322 | laser and (submount or mount or substrate or wafer or base) and (lid or cover) and ((metal or layer or surface or region or film) near3 (In or Ga or Hg or Sn or Pb or indium or gallium or mercury or tin or lead)) and (photodetector or (photo near3 detector)) and "372"/\$.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 14:18 |
| S88 | 375 | S87 and (submount or mount or substrate or wafer or base) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 14:26 |
| S87 | 416 | (laser) and ((metal or layer or region or film or conduct\$3) near5 (((cool\$4 or cold) near2 flow\$3) or ((cool\$4 or cold) near2 yield\$1) or ((cool\$4 or cold) near2 down) or ((cool\$4 or cold) near2 off) or cold or chill\$3)) and (cover or housing or lid) and (heat near2 sink) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 14:44 |
| S89 | 21 | (laser near3 packag\$3) and ((metal or layer or region or film or conduct\$3) near5 (((cool\$4 or cold) near2 flow\$3) or ((cool\$4 or cold) near2 yield\$1) or ((cool\$4 or cold) near2 down) or ((cool\$4 or cold) near2 off) or cold or chill\$3)) and (cover or housing or lid) and (heat near2 sink) and (submount or mount or substrate or wafer or base) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 14:46 |

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| S90 | 27 | (laser near3 (housing or packag\$3)) and ((metal or layer or region or film or conduct\$3) near5 (((cool\$4 or cold) near2 flow\$3) or ((cool\$4 or cold) near2 yield\$1) or ((cool\$4 or cold) near2 down) or ((cool\$4 or cold) near2 off) or cold or chill\$3)) and (cover or housing or lid) and (heat near2 sink) and (submount or mount or substrate or wafer or base) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 14:50 |
| S91 | 29 | (laser near3 (housing or packag\$3)) and ((metal or layer or region or film or conduct\$3) near5 (((cool\$4 or cold) near2 flow\$3) or ((cool\$4 or cold) near2 yield\$1) or ((cool\$4 or cold) near2 down) or ((cool\$4 or cold) near2 off) or cold or chill\$3)) and (heat near2 sink) and (submount or mount or substrate or wafer or base) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 14:51 |
| S93 | 98 | ((("5965946") or ("6162651") or ("6954034") or ("5874011") or ("5973396") or ("5764485") or ("5857049") or ("6168969") or ("6139674") or ("4927992") or ("4945391") or ("5264392") or ("5481082") or ("5749041") or ("4523802") or ("4617723") or ("4911512") or ("4941067") or ("4997253") or ("5018005") or ("5177753") or ("5189781") or ("5226052") or ("5245620") or ("5305344") or ("5309460") or ("5343176") or ("5479029") or ("5544184") or ("5557116") or ("5578227") or ("5612576") or ("5622815") or ("5626278") or ("5694048") or ("5763002") or ("5770238") or ("5774616") or ("5835518") or ("5859942") or ("5867303") or ("5872360") or ("5898718") or ("5903050") or ("5960259") or ("6025213") or ("6037565") or ("6072179") or ("6229097") or ("6244121").pn.) or ("6277656") or ("6277659") or ("6281106") or ("6298075") or ("6303396") or ("6350624") or ("6379777") or ("6649832") or ("6746889") or ("6752308") or ("6823582") or ("6858871") or ("6895029") or ("5334306") or ("4482197") or ("4502745") or ("4503609") or ("4764800") or ("5882773") or ("5896642") or ("6054767") or ("6138544") or ("4436557") or ("5019552") or ("5359687") or ("5640667") or ("5715063") or ("6046426") or ("6143401") or ("4779282") or ("4914669") or ("5012316") or ("5255431") or ("5264912") or ("5351258") or ("5365409") or ("5382457") or ("5461600") or ("5523608") or ("5563702") or ("5572598") or ("5598387") or ("5632204") or ("5653019") or ("5725989") or ("5728994") or ("5733711") or ("5737072") or ("5756175") or ("5770721").pn.)). PN. | USPAT | OR | OFF | 2006/01/12 15:25 |
| S92 | 2 | S91 not S90 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/12 15:25 |
| S95 | 3 | (laser near3 die) and (cover or lid) and (metal or (heat near2 (sink or dissipat\$3))) | USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/17 13:50 |
| S94 | 966 | (laser near3 die) and (cover or lid) and (metal or (heat near2 (sink or dissipat\$3))) | US-PGPUB; USPAT | AND | ON | 2006/01/17 13:51 |
| S96 | 526 | (laser near3 die) and (cover or lid) and (metal or (heat near2 (sink or dissipat\$3))) | USPAT | AND | ON | 2006/01/17 13:52 |
| S99 | 0 | (laser near3 die) and (cover or lid) and ((metal near2 (flow\$3)) or (heat near2 (sink or dissipat\$3))) | USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/17 13:53 |
| S98 | 122 | (laser near3 die) and (cover or lid) and ((metal near2 (flow\$3)) or (heat near2 (sink or dissipat\$3))) | US-PGPUB | AND | ON | 2006/01/17 13:53 |
| S97 | 109 | (laser near3 die) and (cover or lid) and ((metal near2 (flow\$3)) or (heat near2 (sink or dissipat\$3))) | USPAT | AND | ON | 2006/01/17 13:56 |
| S10 0 | 20 | (laser near3 die) and ((cover\$3 near2 mov\$4) or lid) and ((metal near2 (flow\$3)) or (heat near2 (sink or dissipat\$3))) | USPAT | AND | ON | 2006/01/17 15:06 |
| S10 3 | 0 | (laser near1 die) and ((cover\$3 near2 mov\$4) or lid) and ((metal near2 (flow\$3 or creep\$3)) or heatsink or (heat near2 (sink or dissipat\$3))) and "372"/\$.ccls. | USPAT | AND | ON | 2006/01/17 15:08 |
| S10 2 | 26 | (laser near3 die) and 372/36.ccls. | USPAT | AND | ON | 2006/01/17 15:08 |
| S10 5 | 72 | S97 not S104 | US-PGPUB; USPAT | AND | ON | 2006/01/17 15:12 |

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|----------|-------|--|--|-----|-----|------------------|
| S10 8 | 1 | (laser near1 die) and (cover\$3 or frame or lid or housing) and ((metal near2 (flow\$3 or creep\$3 or heat)) or heatsink or (heat near2 (sink or dissipat\$3 or conduct\$3))) | USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/17 15:13 |
| S10 7 | 51 | (laser near1 die) and (cover\$3 or frame or lid or housing) and ((metal near2 (flow\$3 or creep\$3 or heat)) or heatsink or (heat near2 (sink or dissipat\$3 or conduct\$3))) | US-PGPUB | AND | ON | 2006/01/17 15:13 |
| S10 4 | 60 | (laser near1 die) and (cover\$3 or frame or lid or housing) and ((metal near2 (flow\$3 or creep\$3)) or heatsink or (heat near2 (sink or dissipat\$3))) | USPAT | AND | ON | 2006/01/17 15:13 |
| S10 1 | 6 | (laser near3 die) and 372/34.ccls. | USPAT | AND | ON | 2006/01/17 15:16 |
| S10 9 | 8 | (laser near3 die) and 372/34.ccls. | US-PGPUB | AND | ON | 2006/01/17 15:17 |
| S11 0 | 11 | S106 and "372"/\$.ccls. | USPAT | AND | ON | 2006/01/17 15:25 |
| S11 1 | 30 | S106 and ("372"/\$.ccls. or "257"/\$.ccls. or "4385"/\$.ccls.) | USPAT | AND | ON | 2006/01/17 15:26 |
| S10 6 | 74 | (laser near1 die) and (cover\$3 or frame or lid or housing) and ((metal near2 (flow\$3 or creep\$3 or heat)) or heatsink or (heat near2 (sink or dissipat\$3 or conduct\$3))) | USPAT | AND | ON | 2006/01/17 15:27 |
| S11 5 | 1571 | (laser) and (cover\$3 or frame or lid or housing) and ((metal near2 (flow\$3 or creep\$3 or heat)) or heatsink or (heat near2 (sink or dissipat\$3 or conduct\$3))) and "438"/\$.ccls. | USPAT | AND | ON | 2006/01/17 15:28 |
| S11 4 | 3474 | (laser) and (cover\$3 or frame or lid or housing) and ((metal near2 (flow\$3 or creep\$3 or heat)) or heatsink or (heat near2 (sink or dissipat\$3 or conduct\$3))) and "257"/\$.ccls. | USPAT | AND | ON | 2006/01/17 15:28 |
| S11 6 | 1 | ("20040164402").PN. | US-PGPUB | OR | OFF | 2006/01/17 15:30 |
| S11 3 | 1497 | (laser) and (cover\$3 or frame or lid or housing) and ((metal near2 (flow\$3 or creep\$3 or heat)) or heatsink or (heat near2 (sink or dissipat\$3 or conduct\$3))) and "372"/\$.ccls. | USPAT | AND | ON | 2006/01/17 15:30 |
| S11 2 | 16449 | (laser) and (cover\$3 or frame or lid or housing) and ((metal near2 (flow\$3 or creep\$3 or heat)) or heatsink or (heat near2 (sink or dissipat\$3 or conduct\$3))) | USPAT | AND | ON | 2006/01/17 15:33 |
| S11 8 | 13 | (Yoshimura near2 Hideaki).in. | USPAT | AND | ON | 2006/01/17 15:34 |
| S11 7 | 167 | (laser near2 die) and (cover\$3 or frame or lid or housing) and ((metal near2 (flow\$3 or creep\$3 or heat)) or heatsink or (heat near2 (sink or dissipat\$3 or conduct\$3))) | USPAT | AND | ON | 2006/01/17 15:34 |
| S12 0 | 0 | ("2003-044335").PN. | JPO | OR | OFF | 2006/01/17 15:47 |
| S12 2 | 0 | ((("20010028110") or ("20000031918") or ("5,527,604") or ("5763950") or ("5637925") or ("6127724"))).PN. | JPO | OR | OFF | 2006/01/17 15:49 |
| S12 1 | 1 | ("2003044335").PN. | JPO | OR | OFF | 2006/01/17 15:49 |
| S12 3 | 5 | ((("20010028110") or ("20000031918") or ("5,527,604") or ("5763950") or ("5637925") or ("6127724"))).PN. | US-PGPUB; USPAT | OR | OFF | 2006/01/17 15:50 |
| S12 4 | 1 | ("2004253703").PN. | JPO | OR | OFF | 2006/01/17 16:25 |
| S12 7 | 260 | 372/36.ccls. and (laser near3 packag\$3) | US-PGPUB; USPAT | AND | ON | 2006/01/17 16:26 |
| S12 6 | 920 | 372/36.ccls. | US-PGPUB; USPAT | AND | ON | 2006/01/17 16:26 |
| S12 5 | 66 | 372/36.ccls. and LID | US-PGPUB; USPAT | AND | ON | 2006/01/17 16:40 |
| S12 9 | 4 | S125 not S128 | US-PGPUB; USPAT | AND | ON | 2006/01/17 16:41 |
| S13 0 | 381 | 372/36.ccls. and (LID or packag\$3) and laser and (metal or heatsink or (heat near2 (sink or conduct\$4 or dissipat\$3))) | US-PGPUB; USPAT | AND | ON | 2006/01/17 16:43 |
| S12 8 | 62 | 372/36.ccls. and LID and laser and (metal or heatsink or (heat near2 (sink or conduct\$4 or dissipat\$3))) | US-PGPUB; USPAT | AND | ON | 2006/01/17 16:43 |
| S13 1 | 319 | S130 not S125 | US-PGPUB; USPAT | AND | ON | 2006/01/18 08:06 |

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| S13 2 | 13 | ("3867003" "4091408" "4566027" "5454002" "5544269" "5578869" "5616886" "5834842" "5913108" "6256200" "6299056" "6306680" "6307871").PN. OR ("6791181").URPN. | US-PGPUB; USPAT; USOCR | AND | ON | 2006/01/18 10:49 |
| S11 9 | 24 | (Yoshimura near2 Hideaki).in. | US-PGPUB; USPAT | AND | ON | 2006/01/18 14:15 |
| S13 3 | 3090 | 257/717,718,712,719.ccls. | US-PGPUB; USPAT | AND | ON | 2006/01/18 14:16 |
| S13 7 | 37 | S134 and lid and laser | US-PGPUB; USPAT | AND | ON | 2006/01/18 14:17 |
| S13 6 | 206 | S134 and lid | US-PGPUB; USPAT | AND | ON | 2006/01/18 14:17 |
| S13 5 | 244 | S134 and laser | US-PGPUB; USPAT | AND | ON | 2006/01/18 14:17 |
| S13 4 | 2069 | S133 and (heatsink or (heat near2 sink)) | US-PGPUB; USPAT | AND | ON | 2006/01/18 14:19 |
| S13 9 | 3 | S133 and (heatsink or (heat near2 sink)) and lid and (laser or chip) AND (photodiode or (photo near2 diode)) | US-PGPUB; USPAT | AND | ON | 2006/01/18 14:29 |
| S14 1 | 61 | ((semiconductor near3 chip) same (laser near2 (dye or die))) | US-PGPUB; USPAT | AND | ON | 2006/01/18 14:57 |
| S14 2 | 32 | S141 not S140 | US-PGPUB; USPAT | AND | ON | 2006/01/18 15:00 |
| S14 0 | 29 | ((semiconductor near3 chip) with (laser near2 (dye or die))) | US-PGPUB; USPAT | AND | ON | 2006/01/18 15:09 |
| S14 4 | 2 | (("6,515,360" or ("6,369,380")).PN. | US-PGPUB; USPAT | OR | OFF | 2006/01/18 15:14 |
| S14 3 | 10 | ((("20030183909") or ("6,654,248") or ("6,603,183") or ("6,282,096") or ("5,796,582") or ("20020185748") or ("6,407,461") or ("6,392,890") or ("6,278,182") or ("4,801,998")).PN. | US-PGPUB; USPAT | OR | OFF | 2006/01/18 15:14 |
| S14 5 | 4 | S133 and (heatsink or (heat near2 sink)) and lid and (laser or chip) and lens | US-PGPUB; USPAT | AND | ON | 2006/01/18 15:41 |
| S14 7 | 135 | S146 and pin\$1 | US-PGPUB; USPAT | AND | ON | 2006/01/18 15:42 |
| S14 9 | 212 | (heatsink or (heat near2 sink)) and laser and (lens with (substrate or submount or mount)) and pin\$1 | USPAT | AND | ON | 2006/01/18 15:51 |
| S14 8 | 435 | (heatsink or (heat near2 sink)) and laser and (lens with (substrate or submount or mount)) and pin\$1 | US-PGPUB; USPAT | AND | ON | 2006/01/18 15:51 |
| S14 6 | 163 | (heatsink or (heat near2 sink)) and lid and (laser or chip) and (lens with (substrate or submount or mount)) | US-PGPUB; USPAT | AND | ON | 2006/01/18 15:51 |
| S15 0 | 13 | (heatsink or (heat near2 sink)) and laser and (lens with (substrate or submount or mount)) and pin\$1 and "372"/\$.ccls. | USPAT | AND | ON | 2006/01/18 15:53 |
| S15 3 | 48 | S151 not S152 | US-PGPUB; USPAT | AND | ON | 2006/01/18 16:16 |
| S15 1 | 114 | (laser near2 packag\$3) and (lens with (substrate or submount or mount)) and pin\$1 | USPAT | AND | ON | 2006/01/18 16:16 |
| S15 2 | 78 | (laser near2 packag\$3) and (lens with (base or substrate or wafer or mount or submount)) and (pin\$1 with (base or substrate or wafer or mount or submount)) | USPAT | AND | ON | 2006/01/18 16:17 |
| S15 4 | 89 | (laser near2 packag\$3) and (lens with (base or substrate or wafer or mount or submount)) and (pin\$1 with (base or substrate or wafer or mount or submount)) | US-PGPUB; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/18 16:22 |
| S15 5 | 3093 | 257/717,718,712,719.ccls. | US-PGPUB; USPAT | AND | ON | 2006/01/19 06:10 |
| S13 8 | 164 | S133 and (heatsink or (heat near2 sink)) and lid and (laser or chip) | US-PGPUB; USPAT | AND | ON | 2006/01/19 06:10 |
| S15 8 | 16 | ((semiconductor near3 chip) same (laser near2 (dye or die))) | USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/01/19 06:20 |
| S15 6 | 3 | S155 and (heatsink or (heat near2 sink)) and lid and (photodiode or (photo near2 diode)) | US-PGPUB; USPAT | AND | ON | 2006/01/19 06:20 |

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|----------|-----|---|--------------------|-----|----|------------------|
| S15 7 | 61 | ((semiconductor near3 chip) same (laser near2 (dye or die))) | US-PGPUB; USPAT | AND | ON | 2006/01/19 06:22 |
| S16 2 | 76 | S161 not S159 | US-PGPUB; USPAT | AND | ON | 2006/01/19 06:24 |
| S16 1 | 95 | ((chip) same (laser near1 (dye or die))) | US-PGPUB; USPAT | AND | ON | 2006/01/19 06:24 |
| S16 0 | 33 | ((chip) with (laser near1 (dye or die))) | US-PGPUB; USPAT | AND | ON | 2006/01/19 06:24 |
| S15 9 | 19 | ((semiconductor near3 chip) same (laser near1 (dye or die))) | US-PGPUB; USPAT | AND | ON | 2006/01/19 06:27 |
| S16 3 | 199 | ((semiconductor near3 chip) and (laser near1 (dye or die))) | US-PGPUB; USPAT | AND | ON | 2006/01/19 06:31 |
| S16 4 | 180 | S163 not S157 | US-PGPUB; USPAT | AND | ON | 2006/01/19 06:56 |
| S16 5 | 20 | S164 and (laser near2 (packag\$3 or housing)) | US-PGPUB; USPAT | AND | ON | 2006/01/19 06:57 |
| S16 6 | 368 | ((TIM or (thermal near2 interface near2 material)) with (Indium or galium or mercury or tin or Ga or Hg or Sn or Pb)) | US-PGPUB; USPAT | AND | ON | 2006/01/19 07:37 |
| S16 7 | 183 | ((TIM or (thermal near2 interface near2 material)) near4 (Indium or galium or mercury or tin or Ga or Hg or Sn or Pb)) | US-PGPUB; USPAT | AND | ON | 2006/01/19 07:38 |
| S16 8 | 25 | ((thermal near2 interface near2 material)) near4 (Indium or galium or mercury or tin or Ga or Hg or Sn or Pb)) | US-PGPUB; USPAT | AND | ON | 2006/01/19 07:49 |
| S16 9 | 3 | ((thermal near2 interface near2 material)) near4 (Indium or galium or mercury or tin or Ga or Hg or Sn or Pb)) and laser | US-PGPUB; USPAT | AND | ON | 2006/01/19 07:57 |
| S17 0 | 11 | ((thermal near2 interface near2 material)) WITH (Indium or galium or mercury or tin or Ga or Hg or Sn or Pb)) and laser | US-PGPUB; USPAT | AND | ON | 2006/01/19 08:23 |
| S17 1 | 11 | ((thermal near2 interface near2 material)) WITH (Indium or galium or mercury or tin or Ga or Hg or Sn or Pb)) and laser and (semiconductor (device or laser or chip)) | US-PGPUB; USPAT | AND | ON | 2006/01/19 08:24 |